FIXED ASSET SYSTEM USER MANUAL

DEPRECIATION TYPES AND PROCESSES

INTRODUCTION

Depreciation is the process of allocating the cost of an asset over the estimated future periods that will benefit from the use of the asset. This chapter explains the reason for and the process of depreciation.
The chapter is divided into the following topics:

- Depreciation in General
- Purpose of Depreciation
- FAS Depreciation Process
- Depreciation - Statewide Capitalized Assets
- Depreciation - Agency Capitalized Assets
- Automated Processes
- Straight Line Depreciation
- Double Declining Balance Depreciation
- Sum of the Years Digits Depreciation

DEPRECIATION IN GENERAL

Depreciation represents a systematic allocation of the cost of a fixed asset that is in service over its estimated economic life (i.e., the future periods that will benefit from the use of the asset).

Governmental fund types focus on the flow of current financial resources, so the entire cost of a fixed asset is **expensed** through the fund's operating statement in the period the asset is purchased. Accordingly, no allocation is required in future periods.

Proprietary fund types focus on the flow of economic resources, so the entire cost of a fixed asset is **capitalized** in the fund and allocated to the periods of service through depreciation.

It is important to note that depreciation has no direct effect on cash. It is simply an allocation of the historical cost (if purchased) or the fair market value (if received by donation or seizure) of the asset.

GOVERNMENTAL FUND TYPES

Although depreciation is not recorded in a governmental fund, it is acceptable to record accumulated depreciation in the General Fixed Assets Account Group (GFAAG). This is optional, but if used, is subject to the conventional accounting standards with respect to the depreciation method, estimated economic life, and estimated salvage value.

See the depreciation discussion below, as it relates to proprietary funds for guidance on calculating depreciation. Once the depreciation is calculated, it may be entered in the GFAAG.

PROPRIETARY FUND TYPES

Depreciation methods represent the mechanism for allocating the cost of the asset to each accounting period. The State of Idaho uses time-based depreciation methods.

Time-based depreciation allocates the cost of the asset based on time. Each time-based depreciation method requires an adopted convention. The convention determines how the asset will be depreciated in the year the asset is acquired. For instance, if the entity adopts a full month convention, then depreciation will be calculated for the entire month in the month of acquisition. There are numerous conventions relating to months, quarters, and years - it is up to the reporting entity to determine which method to use.

The following time-based depreciation methods will function using the adopted convention:

- **Straight Line** – This method allocates an equal amount of the cost of an asset to each time period within the useful life of the asset.
- **Double Declining Balance** – This method is an accelerated straight line calculation. The straight line rate is determined and then multiplied by two.
- **Sum of the Years Digits** – This method divides the number of time periods remaining by the sum of the total number of time periods. For example, the year one allocation rate of a five-year asset would be 5/15ths (33%) and the year two rate would be 4/15ths (27%).

An example of a depreciation journal entry is as follows:

Depreciation Expense	$2,000	
Accumulated Depreciation		$2,000

If an asset was acquired by donation or transferred from another fund, the value of the receipt is recorded as contributed capital in the proprietary fund. In these cases, the proprietary fund has

the option of closing the related depreciation expense against retained earnings (this is normally the case) or contributed capital.

CALCULATING DEPRECIATION

To calculate depreciation, three pieces of information are used:

- **Depreciation Base** - The depreciation base is usually the historical cost of the asset net of any positive adjustments and negative adjustments.
  Positive adjustments usually reflect improvements.
  Negative adjustments may be partial dispositions, reductions due to casualty loss, accumulated depreciation, and salvage value.
- **Useful Life** - The useful life of an asset is an estimate and represents the number of years the asset is expected to be in service. The depreciation base is allocated over the useful life.
- **Depreciation Method** - The depreciation method is the process performed to figure the amount of depreciation allocated to each period.

OBJECTIVES OF DEPRECIATION

Depreciating assets supports three primary objectives:

- **Comprehensive Annual Financial Report (CAFR)** - To produce and publish an audited CAFR, Idaho must depreciate assets in accordance with Generally Accepted Accounting Principles (GAAP).
- **Grant Management** – The Office of Management and Budget (OMB) Circular A-87 requires certain assets to be depreciated over their useful life, as opposed to charging the entire cost to the grant at the time of purchase.
- **Budget Estimates** - Reflecting assets net of accumulated depreciation may aide agency personnel in budgeting for future replacement of capitalized assets.

FAS DEPRECIATION PROCESS

FAS calculates depreciation on all statewide and agency capitalized assets. Depreciation within FAS is completely automated. Depreciation is run near the end of every month at the discretion of the State Controller's Office. FAS accommodates two types of depreciation processes – one for Statewide Capitalized Assets and one for Agency Capitalized Assets.

For both statewide and agency depreciation, an agency determines the useful life and the salvage value as follows:

- **Setting the Useful Life** - The useful life of an asset is defined by the class code in FAS Descriptor Table 02. The useful life may be overridden when inputting the asset into FAS. If it is overridden, the useful life must fall within the range of years defined in FAS Descriptor Table 16.
- **Determining the Salvage Value** - The salvage value of an asset is an estimate of what the asset's value will be when it is disposed of. The salvage value represents the amount of cash you estimate would be received in exchange for the asset or the amount of credit applied to another asset for trade-in purposes. Salvage value is an optional amount field.

FAS sets the agency capitalization amount and the agency depreciation method as follows:

- **Setting the Agency Capitalization Amount** - The agency capitalization amount is defined on the Organization Control Table (25) within STARS. The agency capitalization amount can be any number greater than the inventorial amount, (also defined on the Organization Control Table) and less than or equal to the statewide capitalization amount, (defined in STARS Descriptor Table 01).
  NOTE: Refer to the STARS User Manual for additional information on the Organization Control Table and the Entity Descriptor Table.
- Currently the statewide capitalization amount is $5,000 and the inventorial amount is $300. You may set the agency capitalized amount between $300 and $5,000. Any asset with an acquisition amount greater than or equal to the agency capitalization amount will be depreciated for the agency using the agency defined depreciation method.
- **Setting the Agency Depreciation Method** - The agency depreciation method is defined on the Organization Control Table (25) within STARS. Valid agency depreciation methods are straight line, double declining balance, and sum of the years digits.
- The defined method can be overridden on an asset-by-asset basis when entering the asset into FAS for agency use, but not for statewide use. Statewide capitalized assets (assets greater than $5,000) are depreciated in STARS using the straight line method, regardless of the depreciation method used at the agency level.

FAS calculates prior year depreciation as follows:
Calculating Prior Year Depreciation – If the In-Service Date is less than the first date of the current fiscal year AND the last depreciation date is blank, then FAS calculates the number of prior year periods and depreciates using the straight line method (regardless of the actual method) and using FAS transaction codes D06 – D09.

DEPRECIATION OF STATEWIDE CAPITALIZED ASSETS

A statewide capitalized asset is any asset added to FAS with a historical cost or fair market value greater than the statewide capitalization amount (currently, $5,000) set in the STARS Descriptor Table 01.

Statewide capitalized assets have an "S" as the capitalization indicator (CAP IND) in the FAS Property File (screen 40). The need for uniformity in financial reporting on a statewide basis requires the State to depreciate all statewide capitalized assets in the same manner. Therefore, all statewide capitalized assets will be depreciated within FAS using straight line depreciation. The exception is land, which is not depreciated in FAS in accordance with Generally Accepted Accounting Principles.

NOTE: FAS calculates and stores depreciation information for all assets with a CAP IND of "S".

If an asset is depreciated in FAS, it does not necessarily mean that the depreciation entries will be sent to STARS. This is determined by the funding source of the asset. Generally Accepted Accounting Principles (GAAP) require that depreciation expense for proprietary type funds is recorded.

Proprietary fund types include Enterprise, Internal Service, Non-Expendable Trust, and Pension Trust funds.
Governmental fund types include General, Special Revenue, Capital Projects, and Debt Service funds.

DEPRECIATION OF AGENCY CAPITALIZED ASSETS

An agency capitalized asset is any asset added to FAS with a historical cost or fair market value greater than or equal to the agency capitalization amount set on the Organization Control Table (25) in STARS, but less than the statewide capitalization amount of $5,000.

Agency capitalized assets have an "A" as the capitalization indicator (CAP IND) in the FAS Property File and are depreciated within FAS using the depreciation method selected at the time the asset was posted into FAS.

NOTE: Land will not be depreciated in FAS.

Depreciation entries will not be sent to STARS for agency capitalized assets. The depreciation calculations are for internal management purposes only.

NOTE: If an asset is a statewide capitalized asset (CAP IND = "S"), both statewide depreciation and agency depreciation will be calculated and tracked within FAS. Only the statewide depreciation for proprietary fund types is sent to STARS.

AUTOMATED PROCESSES

Several automated processes will calculate and/or post depreciation:

1. The State Controller's Office determines when depreciation will be run (usually at the end of the month). They will set the depreciation run indicator to "Y" on STARS Date Descriptor Table 61 to initiate the FAS depreciation process during the nightly update. (Refer to the STARS User Manual for additional information on STARS Descriptor Table 61.)
   NOTE: For agency capitalized assets, FAS calculates agency depreciation only. Statewide and agency accumulated depreciation are separate financial fields (buckets) within the FAS Property File.
2. Once the depreciation amount is calculated, FAS generates a FAS transaction code (TC) in the **D01**-**D04** range for each asset depreciated, depending on the class of the asset.
3. The depreciation transaction code will post the amount of statewide depreciation (if applicable) to the STWD ACCUM DEPR field in the FAS Property File (screen S040).
4. The depreciation transaction will also post the amount of agency depreciation to the AGY ACCUM DEPR field in the FAS Property File.
5. Along with posting the depreciation amounts, the FAS depreciation transaction will post the current effective date to the DEPR DT field. Although the FAS depreciation transactions flow through the FAS Hold File, you will not be able to view these transactions. The transactions will be generated and posted within the same night.
6. Additionally, FAS generates STARS transactions for statewide capitalized assets that have proprietary fund sources. The STARS transactions will post during the following night's update process.

The following types of asset records will not depreciate:

- Asset records that have a last depreciation date within the current month.
- Asset records that still reside in the FAS Hold File with a STATUS other than "P".
- Asset records that have a disposition date, meaning they have been fully disposed.
- Asset records that have no In-Service Date (i.e., Work in Process records).
- Asset records that are neither agency nor statewide capitalized assets.

NOTE: These records will be inventorial assets and have a capitalization indicator (CAP IND) of "I".

STRAIGHT LINE DEPRECIATION

Straight line depreciation divides the cost of an asset equally among each period of the asset's useful life. This depreciation method is used for calculating statewide depreciation and is one of the available methods for calculating agency depreciation.

The FAS depreciation process using the straight line method is as follows:

1. The **depreciation base** is calculated.
   NOTE: This value is the net of the following financial fields (seen in screen 40, Property Maintenance/Inquiry): original amount, positive adjustments, negative adjustments, salvage value, dispositions, and statewide accumulated depreciation or agency accumulated depreciation (depending on whether the calculation is for statewide depreciation or agency depreciation).
2. Once the depreciation base is calculated, it is divided by the total remaining months of the asset's useful life (U LIFE). NOTE: The In-Service Date is used to calculate the number of remaining months.

The amount calculated represents the straight line depreciation amount for the current month.

DOUBLE DECLINING BALANCE DEPRECIATION

Double declining balance depreciation is an accelerated depreciation method. It allocates a greater percentage of the asset to early periods and a smaller percentage of the asset to later periods. The basic premise of this method is that as an asset ages, it begins to wear out, thus provides less value.

Double declining balance depreciation is twice the rate of straight line depreciation. For example, if an asset has a useful life of 5 years, the straight line rate is 20% per year. Since double declining balance depreciation is twice the straight line rate, the rate will be 40% per year.

NOTE: At a certain point in the asset's life, the double declining balance depreciation amount will be less than straight line depreciation would be. At this point, FAS automatically starts posting straight line depreciation.

The FAS depreciation process using the double declining balance method is as follows:

1. The **depreciation base** is calculated.
   NOTE: This value is the net of the following financial fields (screen S040): Original Amount, Positive Adjustments, Negative Adjustments, Dispositions, and Agency Accumulated Depreciation (note the salvage value is not considered in determining the depreciation base for double declining balance depreciation).

2. The rate is calculated by dividing "1" by the total useful life (U LIFE) and multiplying the value by "2". The equation is [2 x (1/total useful life)].
3. FAS then multiplies the depreciation base by the rate, which represents the double declining balance depreciation for the period.
4. Straight line depreciation must now be calculated to compare with the double declining balance depreciation amount. FAS will post the larger of the two amounts.
    a. FAS calculates the straight line depreciation base.
    b. The straight line depreciation base is divided by the total remaining months of useful life.
    c. The amount calculated represents the straight line depreciation amount for the current depreciation period.
5. To choose which depreciation amount will be used for agency depreciation, FAS goes through the following comparisons:
    a. If the straight line depreciation base for the current period (step 4-C) is greater than the double declining balance depreciation (step 3), then FAS will post the straight line depreciation amount (step 4-C).
    b. If the double declining balance depreciation amount (step 3) is greater than the straight line depreciation amount (step 4-C), FAS will post the double declining balance depreciation amount.

SUM OF THE YEARS DIGITS DEPRECIATION

Sum of the years digits depreciation is an accelerated depreciation method, allocating a greater percentage of the asset to early periods and a smaller percentage of the asset to later periods. The basic premise of this method is that as an asset ages, it begins to wear out, thus provides less value.

Sum of the years digits uses a special formula to calculate the rate of depreciation. Unlike double declining balance, the sum of the years digits' rate changes from period to period and never switches over to straight line depreciation.

The FAS depreciation process using the sum of the years digits method is as follows:

1. The depreciation base is calculated.
   NOTE: This value is the net of the following financial fields: Original Amount, Positive Adjustments, Negative Adjustments, Salvage Value, Dispositions, Agency Accumulated Depreciation, Gain, Loss, and Statewide Liquidated Depreciation.
2. Once the depreciation base is calculated, FAS calculates the rate.
    a. The denominator of the rate is figured by adding "1" to the remaining useful life (U LIFE).

b. The rate is then figured by dividing “2” by the denominator. The equation is: 2/(remaining useful life + 1).

3. FAS then multiplies the depreciation base by the rate.

The resulting amount represents the sum of the years digits depreciation amount.